

RRRRRRRR	PPPPPPP	GGGGGGGG	LL		BBBBBBBB
RRRRRRRR	PPPPPPP	GGGGGGGG	LL		BBBBBBBB
RR RR	PP PP	PP GG	LL	II	BB BB
RR RR	PP PP	PP GG	LL	II	BB BB
RR RR	PP PP	PP GG	LL	II	BB BB
RR RR	PP PP	PP GG	LL	II	BB BB
RRRRRRRR	PPPPPPP	GG	LL	II	BBBBBBBB
RRRRRRRR	PPPPPPP	GG	LL	II	BBBBBBBB
RR RR	PP	GG GGGGGG	LL	II	BB BB
RR RR	PP	GG GGGGGG	LL	II	BB BB
RR RR	PP	GG GG	LL	II	BB BB
RR RR	PP	GG GG	LL	II	BB BB
RR RR	PP	GGGGGG	LLLLLLLL	II	BBBBBBBB
RR RR	PP	GGGGGG	LLLLLLLL	II	BBBBBBBB
LL	IIIIII	SSSSSSSS			
LL	IIIIII	SSSSSSSS			
LL	II	SS			
LL	II	SS			
LL	II	SS			
LL	II	SS			
LL	II	SS			
LL	II	SS			
LL	II	SS			
LLLLLLLL	IIIIII	SSSSSSSS			
LLLLLLLL	IIIIII	SSSSSSSS			

0001 0 | RPGII Run-Time Library specific macros and symbols
0002 0 | File: RPGLIB.REQ, Edit: DG1001
0003 0 |
0004 0 | *****
0005 0 | *
0006 0 | * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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0021 0 | * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
0022 0 | * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0023 0 | *
0024 0 | *
0025 0 | *****
0026 0 |
0027 0 | Author: Debess Grabazs, 24-May-1983
0028 0 |
0029 0 | 1-001 - Original. DG 24-May-1983
0030 0 |--
0031 0 |
0032 0 |+
0033 0 | This file is the master source for RPGLIB.L32.
0034 0 | It contains definitions for macros and symbols used internally to the
0035 0 | RPGII Run-Time Library.
0036 0 |-
0037 0 |
0038 0 | LINKAGE
0039 0 | JSB_STR= JSB
0040 0 | (REGISTER = 0, REGISTER = 1, REGISTER = 2):
0041 0 | NOTUSED (9, 10, 11),
0042 0 |
0043 0 | JSB_D= JSB
0044 0 | (REGISTER = 0, REGISTER = 1, REGISTER = 0, REGISTER = 1):
0045 0 | NOTUSED (6, 7, 8, 9, 10, 11),
0046 0 |
0047 0 | JSB_67= JSB
0048 0 | (REGISTER = 6, REGISTER = 7):
0049 0 | NOPRESERVE (2, 3, 4, 5, 6, 7)
0050 0 | NOTUSED (8, 9, 10, 11),
0051 0 |
0052 0 | JSB_678= JSB
0053 0 | (REGISTER = 6, REGISTER = 7, REGISTER = 8):
0054 0 | NOPRESERVE (2, 3, 4, 5, 6, 7, 8)
0055 0 | NOTUSED (9, 10, 11),
0056 0 |
0057 0 | JSB_6789= JSB

I 15

16-Sep-1984 02:08:58
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\$255\$DUA28:[RPGRTL.SRC]RPGLIB.REQ;1

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0058 0 (REGISTER = 6, REGISTER = 7, REGISTER = 8, REGISTER = 9):
0059 0 NOPRESERVE (2, 3, 4, 5, 6, 7, 8, 9)
0060 0 NOTUSED (10, 11);
0061 0
0062 0 LIBRARY 'RTLSTARLE'; ! SYSSLIBRARY:STARLET.L32
0063 0
0064 0 REQUIRE 'RTLIN:RPGDEF'; ! Context area definitions

J 15
16-Sep-1984 02:08:58
15-Sep-1984 22:49:21

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\$_255\$DUA28:[RPGRTL.SRC]RPGDEF.REQ;1

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(1)

R0065 0 File: RPGDEF.REQ, Edit:LPT1015
R0066 0
R0067 0
R0068 0
R0069 0
R0070 0 *****
R0071 0 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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R0087 0 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
R0088 0 *
R0089 0 *****
R0090 0
R0091 0
R0092 0 ++
R0093 0
R0094 0 FACILITY: VAX RPG II
R0095 0
R0096 0 ABSTRACT:
R0097 0
R0098 0 This is a common definition file for VAX RPG II. All definitions
R0099 0 of data structures that must be known by the compiler and the
R0100 0 generated code and RTL support should be included here.
R0101 0 This file should be required in COMLIB.REQ.
R0102 0
R0103 0 ENVIRONMENT: VAX/VMS user mode
R0104 0
R0105 0 AUTHOR: D. Braffitt, CREATION DATE: 12-Nov-1982
R0106 0
R0107 0 MODIFIED BY:
R0108 0
R0109 0 1-001 Original DJB 12-Nov-1983
R0110 0 1-002 Add RPG\$L_CTX_ERROR LPT 14-Feb-1983
R0111 0 1-003 Add program control block macros LPT 18-Mar-1983
R0112 0 1-004 Add RPG\$K_ERR_SUBSC LPT 24-Mar-1983
R0113 0 1-005 Add support for record control/sequence check
R0114 0 blocks; add RPG\$IOEXCEPTION error location
R0115 0 constants; add current CTX area ID DJB 11-Apr-1983
R0116 0 1-006 RPG\$S_CTX_PRINTER should be 32. DJB 12-Apr-1983
R0117 0 1-007 Add RPG\$V_CTX_RNF. DJB 14-Apr-1983
R0118 0 1-008 Change RPG\$A_RCB_EXTFL to RPG\$A_RCB_EXTFLD LPT 25-Apr-1983
R0119 0 1-009 Add RPG\$V_RCB_MATCH LPT 10-Jun-1983
R0120 0 1-010 Fix offset of some RCB fields LPT 10-Jun-1983
R0121 0 ! 1-011 Add RPG\$V_RCB_CNTRLF LPT 22-Jun-1983

R0122 0	1-012	Add RPG\$V CTX_OVPEND	LPT	5-Jul-1983
R0123 0	1-013	Correct PRINTER context area offsets	DJB	05-Jul-1983
R0124 0	1-014	Add RPGSB SCB FLAGS	DJB	20-Jul-1983
R0125 0	1-015	Delete RPGSA_CTX_MATCHAREA	LPT	21-Nov-1983
R0126 0	--			
R0127 0				
R0128 0				
R0129 0	+ Definitions for the RPG II file context area. This area is allocated in PSECT \$LOCAL by the compiler for each file immediately preceding the RAB. The actual size allocated depends on the file type.			
R0130 0				
R0131 0				
R0132 0				
R0133 0				
R0134 0				
R0135 0	MACRO			
R0136 0	RPGSW_CTX_FLAGS=	-4,0,16,0 %,	Flag bits	
R0137 0	RPGSV_CTX_UOFF=	-4,0,1,0 %,	TRUE only if file is conditioned by an external indicator which is off	
R0138 0			TRUE only if file is at end of file	
R0139 0	RPGSV_CTX_EOF=	-4,1,1,0 %,	TRUE only if file is an input file	
R0140 0	RPGSV_CTX_LOOKAH=	-4,2,1,0 %,	which contains look-ahead fields	
R0141 0			TRUE only if last attempt to read from	
R0142 0	RPGSV_CTX_RNF=	-4,3,1,0 %,	file resulted in record not found	
R0143 0			Version number	
R0144 0	RPGSB_CTX_ID=	-1,0,8,0 %,	Error number for RPG detected errors	
R0145 0	RPGSL_CTX_ERROR=	-8,0,32,0 %,	Address of current entry in the	
R0146 0	RPGSA_CTX_SCB=	-12,0,32,0 %,	sequence control block	
R0147 0			Address of the READ routine	
R0148 0	RPGSA_CTX_READ=	-16,0,32,0 %,	Address of the current record control	
R0149 0	RPGSA_CTX_CRCB=	-20,0,32,0 %,	block	
R0150 0			Address of the overflow indicator for	
R0151 0	RPGSA_CTX_OVIND=	-12,0,32,0 %,	this PRINTER file	
R0152 0			# of lines on logical page (1-112)	
R0153 0	RPGSW_CTX_FL=	-14,0,16,0 %,	Overflow line # (1-112)	
R0154 0	RPGSW_CTX_OL=	-16,0,16,0 %,	Current line on printed page	
R0155 0	RPGSW_CTX_LINE=	-18,0,16,0 %,	Flags for print control	
R0156 0	RPGSW_CTX_PFLAGS=	-20,0,16,0 %,	TRUE only before first write to file	
R0157 0	RPGSV_CTX_FIRST=	-20,0,1,0 %,	TRUE only if first page forms	
R0158 0	RPGSV_CTX_1PFORMS=	-20,1,1,0 %,	positioning has been requested	
R0159 0			TRUE is this is an overflow line	
R0160 0	RPGSV_CTX_OVLINE=	-20,2,1,0 %,	TRUE if overflow is pending	
R0161 0	RPGSV_CTX_OVPEND=	-20,3,1,0 %,	# of lines to space before printing	
R0162 0	RPGSW_CTX_SKIPB=	-22,0,16,0 %,	(0-3)	
R0163 0			# of lines to space after printing	
R0164 0	RPGSW_CTX_SKIPA=	-24,0,16,0 %,	(0-3)	
R0165 0			Line number to skip to before printing	
R0166 0	RPGSW_CTX_SPACEB=	-26,0,16,0 %,	(1-112)	
R0167 0			Line number to skip after printing	
R0168 0	RPGSW_CTX_SPACEA=	-28,0,16,0 %;	(1-112)	
R0169 0				
R0170 0				
R0171 0	LITERAL			
R0172 0	RPGSK_CTX_ID=	1.	Current CTX area id	
R0173 0	RPGSS_CTX_OUTPUT=	8.	Size of context area for output files	
R0174 0	RPGSS_CTX_PRINTER=	28.	Size of context area for printer files	
R0175 0	RPGSS_CTX_INPUPD=	20.	Size of context area for input and update files	
R0176 0				

```

R0177 0
R0178 0
R0179 0
R0180 0
R0181 0
R0182 0
R0183 0
R0184 0
R0185 0
R0186 0
R0187 0
R0188 0
R0189 0
R0190 0
R0191 0
R0192 0
R0193 0
R0194 0
R0195 0
R0196 0
R0197 0
R0198 0
R0199 0
R0200 0
R0201 0
R0202 0
R0203 0
R0204 0
R0205 0
R0206 0
R0207 0
R0208 0

    + Definitions for the RPGII file record control and sequence check blocks.
    | This area is allocated in PSECT $LOCAL by the compiler
    | for each input and update file immediately following the record buffer.
    |

MACRO
RPG$A_RCB_RECID= 0,0,32,0 %, | Addr of record identifying indicator
RPG$A_RCB_EXTFLD= 4,0,32,0 %, | Addr of extract field routine
RPG$A_RCB_MATCH_RTN= 8,0,32,0 %, | Addr of match field compare and
                                | extract code
RPG$A_RCB_CFR= 12,0,32,0 %, | Addr of control field compare routine
RPG$W_RCB_FLAGS= 16,0,16,0 %, | Record control block flag bits
RPG$V_RCB_SEQ= 16,0,1,0 %, | TRUE if record type is seq checked
RPG$V_RCB_MATCH= 16,1,1,0 %, | TRUE if record type has match fields
RPG$V_RCB_CNTRLF= 16,2,1,0 %, | TRUE if record type has control fields

RPG$A_SCB_RCB= 0,0,32,0 %, | Address of the RCB of the record which
                                | is the current record in the sequence
RPG$B_SCB_FLAGS= 4,0,8,0 %, | Sequence control block flag bits
RPG$V_SCB_OPT= 4,0,1,0 %, | TRUE if record type is optional
RPG$V_SCB_NO= 4,1,1,0 %, | TRUE if more than one of this record
                                | type may be present
RPG$V_SCB_1SEEN= 4,2,1,0 %, | TRUE if one of the current record type
                                | has been seen
RPG$V_SCB_LAST= 4,3,1,0 %; | TRUE if this is the end of the table
                                | and RPG$A_SCB_RCB contains the
                                | address of the 1st element in the SCB

LITERAL
RPG$S_RCB= 18,           | Size of record control block
RPG$S_SCB= 5;            | Size of sequence check block

```

```
R0209 0      +
R0210 0      Definitions for RPG error handling.
R0211 0      The address of the program control block is found in RPG$A_PCB
R0212 0      which is found offset from the frame pointer.
R0213 0      For version 1, the only field in the program control block
R0214 0      is the internal version number.
R0215 0      -
R0216 0
R0217 0      MACRO
R0218 0      RPG$A_PCB= -4,0,32,0 %, ! Address of program control block
R0219 0      RPG$B_PCB_ID= 0,0,8,0 %; ! Version number
R0220 0
R0221 0      +
R0222 0      Definitions of first parameter to RPG$IOEXCEPTION to describe where
R0223 0      to find IO error.
R0224 0      -
R0225 0
R0226 0      LITERAL
R0227 0      RPG$K_ERR_RAB= 1,           ! Condition value in RAB field
R0228 0      RPG$K_ERR_FAB= 2,           ! Condition value in FAB field
R0229 0      RPG$K_ERR_FILE_CNTXT= 3;    ! Condition value in file context area
R0230 0
R0231 0      +
R0232 0      Definition of literal for error passed to RPG$ERROR
R0233 0      -
R0234 0
R0235 0      LITERAL
R0236 0      RPG$K_ERR_SUBSC= 5;        ! Same as COBOL for now
```

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_ \$255\$DUA28:[RPGRTL.SRC]RPGLIB.REQ;1 Page 7 (1)

: 0237 0
: 0238 0 ! End of file RPGLIB.REQ

Library Statistics

File	-----	Symbols	-----	Pages	Processing
	Total	Loaded	Percent	Mapped	Time
\$_255\$DUA28:[SYSLIB]STARLET.L32;1	9776	0	0	581	00:01.1

COMMAND QUALIFIERS

: BLISS/LIBRARY=LIB\$:/LIST=LISS\$/SOURCE=REQUIRE SRC\$:RPGLIB

: Run Time: 00:03.4
: Elapsed Time: 00:15.5
: Lines/CPU Min: 4262
: Lexemes/CPU-Min: 14579
: Memory Used: 32 pages
: Library Precompilation Complete

0331 AH-BT13A-SE
VAX/VMS V4.0

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